UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,754	12/21/2001	Shizuo Sumida	835.1026	2810

				EXAMINER
21171	7590	11/12/2004		LAU, TUNG S

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ART UNIT	PAPER NUMBER
2863	

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	10/018,754	SUMIDA ET AL.
Office Action Summary	Examiner	Art Unit
	Tung S Lau	2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>15 October 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,2 and 4-18</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,2,4-6,11 and 16</u> is/are rejected.

7)☒ Claim(s) <u>7-10,12-15,17 and 18</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 11, 2, 4, 5, 6, 16 are rejected under 35 U.S.C. 102(b) as being

anticipated by Yamamoto (U.S. Patent 5,594,670).

Regarding claim 1:

Yamamoto discloses a characteristic value identification method comprising:

a first process ' to prepare a government equation representing a functional

model of a product pad and having, at an input and an output on each side (fig.

2, 3) a pair of a potential quantity and a flow quantity values. respectively,

representing a strength and a quantity of energy applied to the product part (Col.

2, Lines 6-51), a second process to convert the functional model into a steady

functional model in a steady state by eliminating terms of a transient internal

characteristic value in the government equation to identify a steady internal

characteristic value of the government equation (fig. 3, Col. 4-7, Lines 62-52) and

a third process identify a-the transient internal characteristic value in the

government equation by using the steady internal characteristic value (Col. 22-

24, Lines 48-4).

Regarding claim 11:

Yamamoto discloses a characteristic value identification apparatus comprising block replacement means for a functional model of a product part representing by government equation having at an input and an output on each side, a potential quantity and a flow quantity representing a strength and a quantity of energy applied to the product part (Col. 2, Lines 6-51), test reproduction means for reproducing at least one steady test model in a steady state of the functional model and at least one transient test model in a transient state (fig. 3, Col. 4-7, Lines 62-52), the functional model being converted into the steady test model in a steady state by eliminating of a transient internal characteristic value in the government equation (fig. 2-3, Col. 5-8, Lines 8-4); testing means of the product part for performing a steady test and a transient test respectively corresponding to the steady test model and the transient test model (Col. 22-24, Lines 48-4), measurement means for collecting steady test data and transient test data at a time when a steady test and a transient test of the product part are performed by the testing means (fig. 3, Col. 4-7, Lines 62-52), and calculating means for identifying a steady internal characteristic value of the steady test model by using the steady test data, for applying the steady internal characteristic value to the transient test model to generate transient phenomenon reproduction data (Col. 22-24, Lines 48-4), and for correcting the transient phenomenon reproduction data based on an error between the transient phenomenon reproduction data and the transient test data, thereby identifying a transient internal characteristic value (Col. 22-24, Lines 48-4).

Regarding claims 2, 4, 5, 6, 16:

Yamamoto also disclose:

The characteristic value identification method wherein the second process

includes; a first step for determining an internal characteristic value of at least

one steady test model from the steady functional model (Col. 2, Lines 6-51), a

second step for collecting steady test data by performing a test corresponding to

the steady test model (Col. 2, Lines 6-51), and a third step for identifying a

steady internal characteristic value of the internal characteristic value based on

the steady test data (Col. 2, Lines 6-51) .

The characteristic value identification method wherein the first step determines

the internal characteristic value from a government equation in the steady state

of the functional model (fig. 3, Col. 4-7, Lines 62-52).

The characteristic value identification method wherein the third step converts the

government equation into a recurrence equation to determine the steady internal

characteristic value from a recurrence coefficient of the recurrence equation (fig.

3, Col. 4-7, Lines 62-52).

The characteristic value identification method wherein the third step divides the

steady internal characteristic value into a known factor and an unknown factor to

identify the steady internal characteristic value of the unknown factor (fig. 3, Col.

4-7, Lines 62-52).

The characteristic value identification method includes a first step for determining

an internal characteristic value of at least one transient test model in a transient

state of the functional model (Col. 2, Lines 6-51), a second step for collecting

transient test data by performing a test corresponding to the transient test model

(Col. 22-24, Lines 48-4), a third step for applying the steady internal

characteristic value to the internal characteristic value of the transient test model

to generate transient phenomenon reproduction data (Col. 22-24, Lines 48-4),

and a fourth step for correcting the transient phenomenon reproduction data

based on an error between the transient phenomenon reproduction data and the

transient test data, thereby identifying a transient internal characteristic value

(Col. 22-24, Lines 48-4).

A virtual testing system which incorporates a functional model, as a virtual

prototype, having an internal characteristic value identified by a characteristic

value identification apparatus comprising condition assigning means for

assigning a driving operation condition and an environment condition to the

characteristic value identification apparatus, observation means for observing

reproduction data obtained by the virtual prototype when the driving operation

condition and the environment condition are assigned (Col. 2, Lines 6-51, fig. 3),

and evaluation means for evaluating an observation result of the observation

means (Col. 2, Lines 6-51, fig. 1).

Claim Objections

2.   Claims 7-10, 12-15 and 17-18 are objected to as being dependent upon a

rejected base claim, but would be allowable if rewritten in independent form

including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach the error does not lie within an allowable range the fourth step repeatedly corrects a predetermined transient internal characteristic value within the transient phenomenon reproduction data until the error lies within the allowable range, and determines the transient internal characteristic value to be identified when the error lies within the allowable range. The use of variance deviation as a time history sensitivity, maximum sensitivity, the evaluation of re-identification machine test data.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

3.   Applicant's arguments filed 10/15/2004 have been fully considered but they are not persuasive.

A. Applicant argues in the lengthy arguments that the prior art does not show the 'first, second and third processes'; Yamamoto discloses 'first, second and third processes' in fig. 2, 3, Col. 2, Lines 6-51, fig. 3, Col. 4-7, Lines 62-52, Col. 22-24, Lines 48-4. The examiner reminds the applicants that while the meaning of

claims of issued patents are interpreted in light of the specification, prosecution

history, prior art and other claims, this is not the mode of claim interpretation to

be applied during examination. During examination, the claims must be

interpreted as broadly as their terms reasonably allowed. This means that the

words of the claim must be given their plain meaning unless applicant has

provided a clear definition in the specification. In re Zletz, 893 F.2d 319, 321, 13

USPQ2d 1320, 1322 (Fed. Cir. 1989).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed

within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the mailing
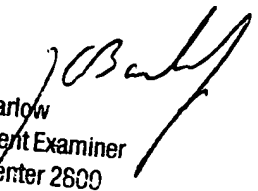
date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL

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